

CLAIMS:

1. A display device comprising an image display panel having a first substrate which is provided with electrodes at the area of pixels, and an illumination system comprising an optical waveguide having an exit face facing the image display panel and a plurality of end faces, at least one of which is an entrance face for light, while light can be coupled into said end face of the optical waveguide, said optical waveguide comprising an optically transparent material between two optically transparent layers the optically transparent material having a higher refractive index than the material of the optically transparent layers, the interface between the optically transparent material and a first of said optically transparent layers at the side away from the image display panel being structured.
2. A display device as claimed in claim 1 both the optically transparent material and the material of the optically transparent layers being substantially optically anisotropic.
3. A display device as claimed in claim 1 in which said first optically transparent layer is structured at the interface.
4. A display device as claimed in claim 1 or 2 in which the interface has a sawtooth structure or a prism structure.
5. A display device as claimed in claim 1 or 2 the optically transparent material being a liquid and the material of the optically transparent layers being glass, quartz or a synthetic material.
6. An illumination system comprising an optical waveguide of an optically transparent material, having an exit face and a plurality of end faces, at least one of said end faces being an entrance face for light situated opposite thereto, while light can be coupled into said end face of the optical waveguide, said optical waveguide comprising an optically transparent material between two optically transparent layers the optically transparent material having a higher refractive index than the material of the optically transparent layers

the interface between the optically transparent material and the interface between the optically transparent material and a first of said optically transparent layer being structured.

7. An illumination system as claimed in claim 6 both the optically transparent
5 material, the material of the optically transparent layers being substantially optically
anisotropic
8. An illumination system as claimed in claim 6 in which one of the optically
transparent layers is structured at the interface.
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9. An illumination system as claimed in claim 6 or 7 in which the interface has a
sawtooth structure or a prism structure.
10. An illumination system as claimed in claim 6 or 7 the optically transparent
15 material being a liquid and the material of the optically transparent layers being glass, quartz
or a synthetic material.